

# Promass 80S



More information and current pricing:

[www.casc.endress.com/80S](http://www.casc.endress.com/80S)

## Benefits:

- Increased process safety – easy cleanable and fully self-drainable tube design
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in/outlet run needs
- Cost-effective – dedicated design for standard applications
- Safe operation – display provides easy readable process information
- Fully industry compliant – IEC/EN/NAMUR

## Specs at a glance

- **Max. measurement error** Mass flow (liquid):  $\pm 0.15\%$  Volume flow (liquid):  $\pm 0.15\%$  Mass flow (gas):  $\pm 0.5\%$  Density (liquid):  $\pm 0.0005 \text{ g/cm}^3$
- **Measuring range** 0 to 70 000 kg/h (0 to 2570 lb/min)
- **Medium temperature range**  $-50$  to  $+150 \text{ }^\circ\text{C}$  ( $-58$  to  $+302 \text{ }^\circ\text{F}$ )
- **Max. process pressure** PN 63, Class 300, 40K
- **Wetted materials** Measuring tube: 1.4539 (904L) Connection: 1.4435 (316L); 1.4404 (316/316L)

**Field of application:** Promass S is at the forefront in hygienic design – Endress+Hauser's industry-optimized measurement solution meets all the hygienic requirements for installation in the Food and Beverage industry. Combined with the proven Promass 80 transmitter with push buttons, Promass 80S offers a cost effective solution for applications requiring optimal cleanability under hygienic conditions.

## Features and specifications

Liquids

Measuring principle

Coriolis

## Liquids

### **Product headline**

The easy-to-clean flowmeter with self-drainable single-tube system and a compact or remote transmitter. Dedicated for applications requiring optimal cleanability under hygienic conditions.

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### **Sensor features**

Reduced installation costs – fully self-drainable tube design enables compact horizontal mounting. Fewer process measuring points – multivariable measurement (flow, density, temperature). Spacesaving installation – no in/outlet run needs. Large range of hygienic process connections. 3-A conform.

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### **Transmitter features**

Cost-effective – dedicated design for standard applications. Safe operation – display provides easy readable process information. Fully industry compliant – IEC/EN/NAMUR. 2-line backlit display with push buttons. Device in compact or remote version.

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### **Nominal diameter range**

DN 8 to 50 ( $\frac{3}{8}$  to 2")

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### **Wetted materials**

Measuring tube: 1.4539 (904L)

Connection: 1.4435 (316L); 1.4404 (316/316L)

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### **Measured variables**

Mass flow, density, temperature, volume flow, corrected volume flow, reference density

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### **Max. measurement error**

Mass flow (liquid):  $\pm 0.15$  %

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## Liquids

**Max. process pressure**

PN 63, Class 300, 40K

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**Medium temperature range**

-50 to +150 °C (-58 to +302 °F)

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**Ambient temperature range**

Standard: -20 to +60 °C (-4 to +140 °F)

Option: -40 to +60 °C (-40 to +140 °F)

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**Sensor housing material**

1.4301 (304), corrosion resistant

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**Transmitter housing material**

Powder-coated die-cast aluminium

1.4301 (304), sheet

CF3M (316L), cast

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**Degree of protection**

IP67, type 4X enclosure. Remote transmitter: IP67, type 4X enclosure

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**Display/Operation**

2-line backlit display with push buttons

Configuration via local display and operating tools possible

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**Outputs**

3 outputs:

0-20 mA (active)/4-20 mA (active/passive)

Pulse/frequency/switch output (passive)

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**Inputs**

Status input

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**Digital communication**

HART

PROFIBUS PA

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## Liquids

### **Power supply**

DC 16 to 62 V

AC 85 to 260 V (45 to 65 Hz)

AC 20 to 55 V (45 to 65 Hz)

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### **Hazardous area approvals**

ATEX, IECEx, FM, CSA, NEPSI

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### **Other approvals and certificates**

3.1 material, calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR, SIL

PED, CRN

3-A, FDA

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### **Product safety**

CE, C-tick, EAC marking

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### **Functional safety**

Functional safety according to IEC 61508, applicable in safety-relevant applications in accordance with IEC 61511

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### **Metrological approvals and certificates**

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR

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### **Pressure approvals and certificates**

PED, CRN

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### **Material certificates**

3.1 material

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### **Hygienic approvals and certificates**

3-A, FDA

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## Gas

### **Measuring principle**

Coriolis

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## Gas

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## Gas

**Max. process pressure**

PN 63, Class 300, 40K

**Medium temperature range**

-50 to +150 °C (-58 to +302 °F)

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PED, CRN

**Material certificates**

3.1 material

**Hygienic approvals and certificates**

3-A, FDA

## Density

**Measuring principle**

Coriolis

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**Density****Characteristic / Application**

Coriolis mass and density flowmeter for the food and beverage industry.

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**Ambient temperature**

-20...+65°C  
(-4...140°F)

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**Process temperature**

-50...+150°C  
(-58...+302°F)

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**Process pressure**

PN 16...40  
CI 150...300  
JIS 20...40K

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**Wetted parts**

904L/1.4539

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**Output**

4...20mA  
Pulse/Frequency  
Status

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**Certificates / Approvals**

ATEX  
FM  
CSA IECEx TIIS NEPSI

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**Density/Concentration****Measuring principle**

Coriolis

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### **Material certificates**

3.1 material

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